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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,884	10/13/2005	Mauri Salmisuo	ST9175PCT(US)	9186

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EXAMINER

PRICE, CRAIG JAMES

ART UNIT	PAPER NUMBER
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3753

MAIL DATE	DELIVERY MODE
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08/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/552,884

Applicant(s)

SALMISUO, MAURI

Examiner

Craig Price

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/13/2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the float, front surface (there is no reference number for this), and bayonet flange, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 3 recite the limitation "said surfaces" and "front surface". There is insufficient antecedent basis for this limitation in the claim. Please clarify.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Abey (GB 595,100), as best understood.

Abey discloses a sanitizable float valve to be used in water purification circulation, the valve comprising a body (3), a closing element (15) placed into the body, the length of the closing element being essentially bigger than the diameter of the closing element, and a float connected to a lever arm (7) for controlling the closing

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element. The allowance between the chamber of the body and the closing element allows a part of the liquid flow to discharge through this allowance thus flushing the surfaces when the valve is open, as shown in the picture, part of the fluid is may be left on the surfaces, therefore not all of the fluid would leave through the allowances.

Regarding claim 2, Abey discloses that the closing element (the cone of 15) of the valve is equipped with a partly convex sealing surface adapting itself to the liquid inlet of the valve, see also column 3, lines 11-15, "valve plug may have its operating end shaped part-spherical".

Regarding claim 3, Abey discloses that the end of the closing element opposite to the front surface is rounded. The cone portion is round and certainly the tip of the cone must have at least some small radius on the tip, see also column 3, lines 11-15, "valve plug may have its operating end shaped part-spherical".

Regarding claim 4, Abey discloses that the valve chamber has a substantially cylindrical form (the chamber contour conforms to the "tubular portion" of the valve) and the closing element of the valve adapting itself thereto has a substantially circular cross section(Col.2, Lns. 83-87).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abey'100 in view of Bierman (2,793,654).

Abey is silent to the float valve having a closing element made from PTFE.

Bierman discloses a float assembly, which teaches a valve made from PTFE (Col.2, Lns. 33-38).

It would have been obvious to one of ordinary skill in the art at the time of invention to employ the PTFE closing element of Bierman into the assembly of Abey in order to "give no leakage" (Col.2, Lns. 33-38).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abey'100 in view of Young (3,785,397).

Abey is silent to the valve being equipped with elements for attaching the valve to a liquid inlet pipe by means of a bayonet flange coupling.

Young discloses a float assembly which teaches the use of a bayonet connection joint (BM,LM).

It would have been obvious to one of ordinary skill in the art at the time of invention to employ the bayonet connection of Young into the device of Abey to have the valve being equipped with elements for attaching the valve to a liquid inlet pipe by means of a bayonet flange coupling in order to "join the two segments firmly into a steady housing combination" (Col.1, Lns. 52-59).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lin (5,351,713), Samiran (2,329,728), Thorn (20,380), Doherty (236,311), Vosburgh (453,069), Alexander (803,518), Reed (1,677,687), Kavin (1,777,091), Tifft (1,873,070), Svirsky (2,270,910), Halverson (2,449,474), Hieger (2,752,937), Shinoda et al. (4,371,000) and Kozik et al. (6,874,528) all disclose similar valves.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 7AM - 5:30PM Mon-Thurs, Increased flex time.

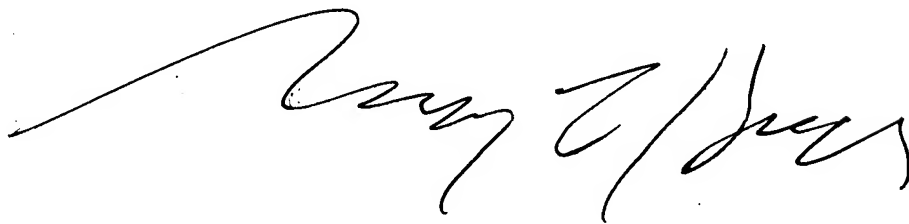
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CP



28 August 2007



GREGORY HUSON
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